CLAIMS

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What is claimed is:

- 1 1. A cryptographic apparatus comprising:
- 2 a data reading means for reading content data and
- 3 cryptographic information from a portable storage medium, the
- 4 cryptographic information including information used to
 - specify a certain part of the content data on which
 - cryptographic processing is to be performed;
 - a part specifying means for specifying, based on the read
 - cryptographic information, the certain part of the read
 - content data; and
 - a cryptographic processing means for performing one of
- $11^{\frac{1}{12}}$ encryption and decryption on the certain part of the read
- 12 content data.
- 1 2. The cryptographic apparatus of Claim 1, wherein:
- a plurality of pieces of content data are each recorded as
- 3 a file on the storage medium, along with cryptographic
- 4 information for each of a plurality of file types; and
- the data reading means reads, from the storage medium, the

- 6 content data of a file and the cryptographic information for a 7 corresponding file type.
- 3. The cryptographic apparatus of Claim 2, wherein:
- 2 the cryptographic information includes a reference
- 3 instruction indicating that a data section in the content data
- 4 be referred to, and
- 5 the part specifying means specifies the certain part by
- 6 referring to the data section as indicated by the reference
- I instruction.

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- 4. The cryptographic apparatus of Claim 3, wherein:
- the cryptographic information includes bit pattern
- information showing a certain bit sequence; and
- the part specifying means detects, in the content data, bit
- data that matches the bit sequence shown in the bit pattern
- 6 information, and uses a location of the bit data as a basis
- 7 for specifying the certain part, the certain part having a
- 8 fixed positional relationship to the bit data.
- 1 5. The cryptographic apparatus of Claim 4, wherein:
- the indicated data section shows a length of the certain
- 3 part; and

the part specifying means specifies the certain part of the
content data by referring to the data section as indicated by
the reference instruction, and calculating the length of the
certain part based on the referenced data section.

6. The cryptographic apparatus of Claim 5, wherein:
the cryptographic information includes a value showing a
unit used for the indicated data section; and

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the part specifying means specifies the certain part by multiplying the length shown by the data section with the unit value to calculate the length of the certain part.

7. The cryptographic apparatus of Claim 6, wherein:
the cryptographic information further includes a detect
instruction for detecting, from the content data, bit data
that matches the certain bit sequence shown by the bit pattern
information, and determines the order in which the reference
and detect instructions are performed; and

the part specifying means specifies the certain part in the content data by performing, in the predetermined order, operations indicated by each of the instructions.

8. The cryptographic apparatus of Claim 3, wherein:

the cryptographic information further includes at least one
piece of algorithm information for specifying an algorithm

used for cryptographic processing; and

the cryptographic processing means performs one of

encryption and decryption on the certain part using the

specified algorithm.

9. The cryptographic apparatus of Claim 2, wherein:
the cryptographic information further includes at least one
piece of algorithm information for specifying an algorithm
used for cryptographic processing; and

the cryptographic processing means performs one of encryption and decryption on the certain part using the specified algorithm.

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- 10. The cryptographic apparatus of Claim 1, wherein the cryptographic information includes a reference instruction indicating that a data section in the content data be referred to, and
- the part specifying means specifies the certain part by referring to the data section as indicated by the reference instruction.

- The cryptographic apparatus of Claim 10, wherein: 1 11. 2 the cryptographic processing means encrypts the certain part; and 3 4 the cryptographic apparatus further comprises a content
- data recording means for recording the encrypted content data 5 onto the storage medium. 6
- The cryptographic apparatus of Claim 10, wherein: 1 2 the cryptographic processing means decrypts the certain 3<u>.</u> part of the content data; and

the cryptographic apparatus further comprises:

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an encrypting information reading means for reading, from another portable storage medium, encrypting information including information used to specify a certain part in the decrypted content data to be encrypted;

an encryption part specifying means for specifying a certain part to be encrypted in the decrypted content data, according to the encrypting information;

an encrypting means for encrypting the part specified by 12 the encrypting information; and 13

a content data recording means for recording the encrypted 14 content data onto the other storage medium. . 15

- 1 13. The cryptographic apparatus of Claim 1, wherein: ;
 2 the cryptographic information further includes at least one
 3 piece of algorithm information for specifying an algorithm
 4 used for cryptographic processing; and
 5 the cryptographic processing means performs one of
 6 encryption and decryption on the certain part using the
 7 specified algorithm.
 - 14. The cryptographic apparatus of Claim 13, wherein:
 the cryptographic information includes a plurality of
 pieces of algorithm information, and pieces of range
 information each showing a range over which an algorithm is
 applied; and

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the cryptographic processing means selects, for each application range in the certain part, a piece of algorithm information based on the range information, and uses an algorithm specified by the piece of algorithm information to perform one of encryption and decryption on the application range.

1 15. The cryptographic apparatus of Claim 14, wherein:
2 the cryptographic information includes information showing
3 priority ratings indicating an order in which the pieces of

- 4 algorithm information should be applied; and
- 5 when the application ranges of a plurality of algorithms
- 6 overlap, the cryptographic processing means selects pieces of
- 7 algorithm information according to the priority ratings.
- 1 16. The cryptographic apparatus of Claim 1, wherein:
- 2 the cryptographic processing means encrypts the certain
- 3 part; and
- the cryptographic apparatus further comprises a content data data recording means for recording the encrypted content data onto the storage medium.
- onto the storage medium.

 17. The cryptographic apparatus of Claim 1, wherein:
 the cryptographic processing means decrypts the certain
 part.
- 1 18. The cryptographic apparatus of Claim 17, further
- 2 comprising:
- 3 an encrypting information reading means for reading, from
- 4 another portable storage medium, encrypting information
- 5 including information used to specify a certain part in the
- 6 decrypted content data to be encrypted;
- 7 an encryption part specifying means for specifying a

- 8 certain part to be encrypted in the decrypted content data;
 9 according to the encrypting information;
- an encrypting means for encrypting the part specified by
 the encrypting information; and
- a content data recording means for recording the encrypted content data onto the other storage medium.
- 1 19. A cryptographic apparatus encrypting content data and 2 recording the encrypted data onto a storage medium, the 30 cryptographic apparatus comprising:

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- a content data obtaining means for obtaining content data;
- a cryptographic information reading means for reading, from a portable storage medium, cryptographic information including information used to specify a certain part of the content data on which cryptographic processing is to be performed;
- a part specifying means for specifying the certain part of the obtained content data based on the read cryptographic information;
- 12 a cryptographic processing means for encrypting the certain 13 part; and
- a content data recording means for recording the encrypted content data onto the storage medium.

- 1 20. The cryptographic apparatus of Claim 19, wherein:
- 2 the storage medium stores a plurality of pieces of content
- 3 data as files, along with cryptographic information for a
- 4 plurality of file types corresponding to files that can be
- 5 stored on the storage medium; and
- 6 the cryptographic information reading means reads the
- 7 cryptographic information for a file type from the storage
- 8 medium; and

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the content data recording means records the encrypted content data onto the storage medium as a file of the file type corresponding to the read cryptographic information.

21. The cryptographic apparatus of Claim 20, wherein: the cryptographic information includes bit pattern information showing a certain bit sequence; and

the part specifying means detects, in the content data, bit

- 5 data that matches the bit sequence shown in the bit pattern
- 6 information, and uses a location of the bit data as a basis
- 7 for specifying the certain part, the certain part having a
- 8 fixed positional relationship to the bit data.
- 1 22. The cryptographic apparatus of Claim 21, wherein:
- the cryptographic information includes a reference

- 3 instruction indicating that a data section in the content data
- 4 be referred to, the data section showing a length of the
- 5 certain part; and

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- 6 the part specifying means specifies the certain part by
- 7 referring to the data section as indicated by the reference
- 8 instruction and calculating the length of the certain part
- 9 based on the referenced data section.
- 1 23. The cryptographic apparatus of Claim 21, wherein:

 the cryptographic information further includes at least one

 piece of algorithm information specifying an algorithm used

 for cryptographic processing; and

 the cryptographic processing means encrypts the certain

the cryptographic processing means encrypts the certain part using the algorithm specified by the algorithm information.

- 1 24. The cryptographic apparatus of Claim 19, wherein:
- 2 the cryptographic information includes bit pattern
- 3 information showing a certain bit sequence; and
- 4 the part specifying means detects, in the content data, bit
- 5 data that matches the bit sequence shown in the bit pattern
- 6 information, and uses a location of the bit data as a basis
- 7 for specifying the certain part, the certain part having a

8 fixed positional relationship to the bit data.

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- 1 25. The cryptographic apparatus of Claim 24, wherein:
- 2 the cryptographic information includes a reference
- 3 instruction indicating that a data section in the content data
- 4 be referred to, the data section showing a length of the
- 5 certain part; and

the part specifying means specifies the certain part by referring to the data section as indicated by the reference instruction and calculating the length of the certain part based on the referenced data section.

- 26. The cryptographic apparatus of Claim 19, wherein: the cryptographic information further includes at least one piece of algorithm information specifying an algorithm used
- 4 for cryptographic processing; and
- the cryptographic processing means encrypts the certain
- 6 part using the algorithm specified by the algorithm
- 7 information.
- 1 27. The cryptographic apparatus of Claim 26, wherein:
- 2 the cryptographic information includes a plurality of

- 3 pieces of algorithm information and pieces of range
- 4 information each showing a range in the content data over
- 5 which an algorithm is applied; and
- 6 the cryptographic processing means selects, for each
- 7 application range in the certain part, a piece of algorithm
- 8 information based on the range information, and uses an
- 9 algorithm specified by the piece of algorithm information to
- 10 encrypt data in the application range.
 - 28. The cryptographic apparatus of Claim 27, wherein:
 the cryptographic information includes information showing
 priority ratings indicating an order in which the pieces of
 algorithm information should be applied; and

when the application ranges of a plurality of algorithms overlap, the cryptographic processing means selects pieces of algorithm information according to the priority ratings.

- 1 29. A cryptographic apparatus comprising:
- 2 a data obtaining means for obtaining, from received data,
- 3 content data, and cryptographic information including
- 4 information used to specify a certain part of the content data
- 5 on which cryptographic processing is to be performed, the
- 6 received data consisting of content data and cryptographic

- 8 a part specifying means for specifying the certain part of
- 9 the obtained content data based on the obtained cryptographic
- 10 information; and
- a cryptographic processing means for performing one of
- 12 encryption and decryption on the certain part of the content
- 13 data.

30. The cryptographic apparatus of Claim 29, wherein:

the cryptographic information includes a reference
instruction indicating that a data section in the content data
be referred to, and

the part specifying means specifies the certain part by referring to the data section as indicated by the reference instruction.

- 1 31. The cryptographic apparatus of Claim 30, wherein:
- 2 the cryptographic information includes sync pattern
- 3 information showing a certain bit sequence; and
- 4 the part specifying means detects, in the content data, a
- 5 sync pattern corresponding to the bit sequence shown in the
- 6 sync pattern information, and uses a location of the sync
- 7 pattern as a basis for specifying the certain part, the

- 1 32. The cryptographic apparatus of Claim 31, wherein:
- 2 the part specifying means verifies the authenticity of the
- 3 detected sync pattern by checking whether another sync pattern
- 4 is located at a position a set interval away from the location
- 5 of the detected sync pattern.
 - 33. The cryptographic apparatus of Claim 31, wherein: the cryptographic information further includes flag pattern information showing a bit sequence, and position information

specifying the position of the bit sequence; and

the part specifying means verifies whether the bit sequence shown by the flag pattern information exists at the position in the content data specified by the position information.

- 1 34. The cryptographic apparatus of Claim 31, wherein:
- the indicated data section shows a length of the certain
- 3 part; and
- 4 the part specifying means specifies the certain part of the
- 5 content data by referring to the data section as indicated by
- 6 the reference instruction, and calculating the length of the

- 7 certain part based on the referenced data section.
- 1 35. The cryptographic apparatus of Claim 34, wherein:
- 2 the cryptographic information includes a value showing a
- 3 unit used for the indicated data section; and
- 4 the part specifying means specifies the certain part by
- 5 multiplying the length shown by the data section with the unit
- 6 value to calculate the length of the certain part.

- 36. The cryptographic apparatus of Claim 35, wherein: the cryptographic information further includes a detect instruction for detecting, from the content data, bit data that matches the certain bit sequence shown by the bit pattern information, and determines the order in which the reference and detect instructions are performed; and
- the part specifying means specifies the certain part in the
- 8 content data by performing, in the predetermined order,
- 9 operations indicated by each of the instructions.
- 1 37. The cryptographic apparatus of Claim 31,
- the cryptographic information further includes at least one
- 3 piece of algorithm information for specifying an algorithm
- 4 used for cryptographic processing; and

- the cryptographic processing means performs one of
- 6 encryption and decryption on the certain part using the
- 7 specified algorithm.
- 1 38. The cryptographic apparatus of Claim 29, wherein:
- 2 the cryptographic information further includes at least one
- 3 piece of algorithm information for specifying an algorithm
- 4 used for cryptographic processing; and
 - the cryptographic processing means performs one of encryption and decryption on the certain part using the specified
 - 39. The cryptographic apparatus of Claim 38, wherein: the cryptographic information includes a plurality of
 - pieces of algorithm information, and pieces of range
 - information each showing a range over which an algorithm is
- 5 applied; and

- 6 the cryptographic processing means selects, for each
- 7 application range in the certain part, a piece of algorithm
- 8 information based on the range information, and uses an
- 9 algorithm specified by the piece of algorithm information to
- 10 perform one of encryption and decryption on the application
- 11 range.

- 1 40. The cryptographic apparatus of Claim 39, wherein:
- 2 the cryptographic information includes information showing
- 3 priority ratings indicating an order in which the pieces of
- 4 algorithm information should be applied; and
- 5 when the application ranges of a plurality of algorithms
- 6 overlap, the cryptographic processing means selects pieces of
- 7 algorithm information according to the priority ratings.
 - 41. The cryptographic apparatus of Claim 29,

the cryptographic processing means decrypts the certain part.

- 42. A cryptographic apparatus performing cryptographic processing on content data, the cryptographic apparatus comprising:
- 4 a content data obtaining means for obtaining content data;
- 5 a cryptographic information obtaining means for obtaining
- 6 cryptographic information including information specifying a
- 7 part on which cryptographic processing is to be performed in
- 8 the contents data, the information including a reference
- 9 instruction indicating that a data section in the content data
- 10 be referred to;

- 11 a part specifying means for specifying the certain part of
- 12 the content data based on the cryptographic information by
- 13 referring to the data section in the content data as indicated
- 14 by the reference instruction; and
- a cryptographic processing means for performing one of
- 16 encryption and decryption on the certain part.
- 1 43. The cryptographic apparatus of Claim 42, wherein:
 - the cryptographic information includes bit pattern
 - information showing a certain bit sequence; and

the part specifying means detects, in the content data, bit

- data that matches the bit sequence shown in the bit pattern
- information, and uses a location of the bit data as a basis
- for specifying the certain part, the certain part having a
- fixed positional relationship to the bit data.
- 1 44. The cryptographic apparatus of Claim 43, wherein:
- 2 the cryptographic information includes a reference
- 3 instruction indicating that a data section in the content data
- 4 be referred to, the data section showing a length of the
- 5 certain part; and

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- 6 the part specifying means specifies the certain part by
- 7 referring to the data section as indicated by the reference

instruction and calculating the length of the certain part* 8

based on the referenced data section. 9

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- 1 45. The cryptographic apparatus of Claim 44, wherein:
- the cryptographic information includes a value showing a 2
- unit used for the indicated data section; and 3
- the part specifying means specifies the certain part by 4 multiplying the length shown by the data section with the unit 5 value to calculate the length of the certain part.
 - The cryptographic apparatus of Claim 45, wherein: 46. the cryptographic information further includes a detect instruction for detecting, from the content data, bit data that matches the certain bit sequence shown by the bit pattern information, and determines the order in which the reference and detect instructions are performed; and
 - 7 the part specifying means specifies the certain part in the
 - content data by performing, in the predetermined order, 8
 - operations indicated by each of the instructions. 9
 - The cryptographic apparatus of Claim 42, wherein: 1
 - the cryptographic information further includes at least one 2

- 3 piece of algorithm information for specifying an algorithm
- 4 used for cryptographic processing; and
- the cryptographic processing means performs one of
- 6 encryption and decryption on the certain part using the
- 7 specified algorithm.
- 1 48. The cryptographic apparatus of Claim 47, wherein:
- 2 the cryptographic information includes a plurality of
- 3 pieces of algorithm information, and pieces of range
 - information each showing a range over which an algorithm is
 - applied; and
 - the cryptographic processing means selects, for each
 - application range in the certain part, a piece of algorithm
 - information based on the range information, and uses an
 - algorithm specified by the piece of algorithm information to
 - perform one of encryption and decryption on the application
- 11 range.

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- 1 49. The cryptographic apparatus of Claim 48, wherein:
- 2 the cryptographic information includes information showing
- 3 priority ratings indicating an order in which the pieces of
- 4 algorithm information should be applied; and
- 5 when the application ranges of a plurality of algorithms

- 6 overlap, the cryptographic processing means selects pieces of
- 7 algorithm information according to the priority ratings.
- 1 50. The cryptographic apparatus of Claim 42, wherein:
- 2 the cryptographic processing means encrypts the certain
- 3 part of the content data; and

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- 4 the cryptographic apparatus further comprises a
- 5 multiplexing transmission means for multiplexing the encrypted
 - content data and the cryptographic information and
 - transmitting the multiplexed data.
 - 51. A program recording medium storing a control program for having a computer execute cryptographic processing on content data, the control program comprising:
 - a data reading step for reading content data and cryptographic information from a portable storage medium, the
- 6 cryptographic information including information used to
- 7 specify a certain part of the content data on which
- 8 cryptographic processing is to be performed;
- 9 a part specifying step for specifying, based on the read
- 10 cryptographic information, the certain part of the read
- 11 content data; and
- 12 a cryptographic processing step for performing one of

- 13 encryption and decryption on the certain part of the read ?
- 14 content data.
- The program recording medium of Claim 51, wherein: 1
- 2 a plurality of pieces of content data are each recorded as
- 3 a file on the storage medium, along with cryptographic
- information for each of a plurality of file types; and 4
- the data reading step reads, from the storage medium, the 5
- content data of a file and the cryptographic information for a 6
- corresponding file type.
 - The program recording medium of Claim 51, wherein: 53.
 - the cryptographic information includes bit pattern
 - information showing a certain bit sequence; and
- the part specifying step detects, in the content data, bit
 - 5 data that matches the bit sequence shown in the bit pattern
 - 6 information, and uses a location of the bit data as a basis
 - 7 for specifying the certain part, the certain part having a
 - fixed positional relationship to the bit data. 8
 - The program recording medium of Claim 51, wherein: 1
 - the cryptographic information further includes at least one 2
 - piece of algorithm information for specifying an algorithm 3

- 4 used for cryptographic processing; and
- 5 the cryptographic processing step performs one of
- 6 encryption and decryption on the certain part using the
- 7 specified algorithm.
- 1 55. The program recording medium of Claim 51, wherein:
- 2 the cryptographic processing step encrypts the certain
- 3 part; and

the cryptographic processing further comprises a content data recording step for recording the encrypted content data onto the storage medium.

- 56. The program recording medium of Claim 51, wherein: the cryptographic processing step decrypts the certain part.
- 1 57. The program recording medium of Claim 56, wherein the
- 2 cryptographic processing further comprises:
- 3 an encrypting information reading step for reading, from
- 4 another portable storage medium, encrypting information
- 5 including information used to specify a certain part in the
- 6 decrypted content data to be encrypted;
- 7 an encryption part specifying step for specifying a certain

- 8 part to be encrypted in the decrypted content data, according
- 9 to the encrypting information;
- 10 an encrypting step for encrypting the part specified by the
- 11 encrypting information; and
- 12 a content data recording step for recording the encrypted
- 13 content data onto the other storage medium.
 - 58. A program recording medium storing a control program for having a computer storing content data execute cryptographic processing on the content data, the cryptographic processing (1) including encryption of the content data and recording of the encrypted content data onto a storage medium, and (2) comprising the following steps:
 - a cryptographic information reading step for reading, from a portable storage medium, cryptographic information including information used to specify a certain part of the content data on which cryptographic processing is to be performed;
- 11 a part specifying step for specifying the certain part of
- 12 the obtained content data based on the read cryptographic
- 13 information;

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- 14 a cryptographic processing step for encrypting the certain
- 15 part; and
- 16 a content data recording step for recording the encrypted

17 content data onto the storage medium.

- 1 59. The program recording medium of Claim 58, wherein
- 2 the storage medium stores a plurality of pieces of content
- 3 data as files, along with cryptographic information for a
- 4 plurality of file types corresponding to files that can be
- 5 stored on the storage medium; and

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the cryptographic information reading step reads the

reads the

cryptographic information for a file type from the storage

medium; and

the content data recording step records the encrypted

the content data recording step records the encrypted content data onto the storage medium as a file of the file type corresponding to the read cryptographic information.

- 60. The program recording medium of Claim 58, wherein:
- the cryptographic information includes bit pattern
- 3 information showing a certain bit sequence; and
- 4 the part specifying step detects, in the content data, bit
- 5 data that matches the bit sequence shown in the bit pattern
- 6 information, and uses a location of the bit data as a basis
- 7 for specifying the certain part, the certain part having a
- 8 fixed positional relationship to the bit data.

- 1 61. The program recording medium of Claim 58, wherein:
- the cryptographic information further includes at least one
- 3 piece of algorithm information for specifying an algorithm
- 4 used for cryptographic processing; and
- 5 the cryptographic processing step performs encryption on
- 6 the certain part using the specified algorithm.
- 1 62. A program recording medium storing a control program

 2 for having a computer execute cryptographic processing on

 3 content data, the cryptographic processing comprising:

 4 a data obtaining step for obtaining, from received data,
 - a data obtaining step for obtaining, from received data, content data, and cryptographic information including information used to specify a certain part of the content data on which cryptographic processing is to be performed, the received data consisting of content data and cryptographic information that has been multiplexed and transmitted;
- a part specifying step for specifying the certain part of the obtained content data based on the obtained cryptographic
- 12 information; and
- a cryptographic processing step for performing one of
- 14 encryption and decryption on the certain part of the content
- 15 data.

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- 1 63. The program recording medium of Claim 62, wherein:
- 2 the cryptographic information includes sync pattern
- 3 information showing a certain bit sequence; and
- 4 the part specifying step detects, in the content data, a
- 5 sync pattern corresponding to the bit sequence shown in the
- 6 sync pattern information, and uses a location of the sync
- 7 pattern as a basis for specifying the certain part, the
- 8 certain part having a fixed positional relationship to the
- 9 sync pattern.

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- 64. The program recording medium of Claim 63, wherein:
 the part specifying step verifies the authenticity of the
 detected sync pattern by checking whether another sync pattern
 is located at a position a set interval away from the location
 of the detected sync pattern.
- 1 65. The program recording medium of Claim 62, wherein:
- 2 the cryptographic information further includes at least one
- 3 piece of algorithm information for specifying an algorithm
- 4 used for cryptographic processing; and
- 5 the cryptographic processing step performs one of
- 6. encryption and decryption on the certain part using the
- 7 specified algorithm.

1 66. A program recording medium storing a control program

for having a computer execute cryptographic processing on 2

content data, the cryptographic processing comprising: 3

a content data obtaining step for obtaining content data; 4

5 a cryptographic information obtaining step for obtaining

cryptographic information including information specifying a 6

part on which cryptographic processing is to be performed in 7

the contents data, the information including a reference 8

instruction indicating that a data section in the content data

be referred to;

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a part specifying step for specifying the certain part of the content data based on the cryptographic information by referring to the data section in the content data as indicated by the reference instruction; and

15 a cryptographic processing step for performing one of encryption and decryption on the certain part. 16

- The program recording medium of Claim 66, wherein: 1 67.
- 2 the cryptographic information includes bit pattern
- information showing a certain bit sequence; and 3
- 4 the part specifying step detects, in the content data, bit
- data that matches the bit sequence shown in the bit pattern 5

- information, and uses a location of the bit data as a basis 6
- for specifying the certain part, the certain part having a 7
- fixed positional relationship to the bit data. 8
- The program recording medium of Claim 67, wherein: 1
- 2 the indicated data section shows a length of the certain
- 3 part; and
- the part specifying step specifies the certain part of the 4 content data by referring to the data section as indicated by 5 the reference instruction, and calculating the length of the
 - certain part based on the referenced data section.
 - 69. The program recording medium of Claim 66, wherein: the cryptographic information further includes at least one piece of algorithm information for specifying an algorithm used for cryptographic processing; and
- 5 the cryptographic processing step performs one of
- encryption and decryption on the certain part using the 6
- 7 specified algorithm.
- A portable data recording medium storing encrypted 1
- content data, the data recording medium comprising: 2
- a content data recording area in which content data, of 3

- 4 which a certain part has been encrypted, is recorded; and $^{\frac{1}{2}}$
- 5 a cryptographic information recording area in which
- 6 cryptographic information, including information used to
- 7 specify the certain part of the content data, is recorded.
- 1 71. The data recording medium of Claim 70, wherein:
- each of a plurality of pieces of encrypted content data is
- 3 recorded as a file in the content data recording area; and

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- cryptographic information is recorded in the cryptographic information recording area according to file type.
- 72. The data recording medium of Claim 71, wherein: the cryptographic information includes a reference instruction instructing a decrypting apparatus decrypting the content data to refer to a data section in the content data.
- 73. The data recording medium of Claim 72, wherein:
- 2 the cryptographic information includes bit pattern
- 3 information showing a certain bit sequence, and information
- 4 instructing the decrypting apparatus to detect, in the content
- 5 data, bit data matching the certain bit sequence and use a
- 6 location of the bit data as a basis for specifying the certain
- 7 part, the certain part having a fixed positional relationship

8 to the bit data.

1 74. The data recording medium of Claim 73, wherein

2 the indicated data section shows a length of the certain

3 part; and

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4 the part specifying step specifies the certain part of the

5 content data by referring to the data section as indicated by

6 the reference instruction, and calculating the length of the

certain part based on the referenced data section.

75. The data recording medium of Claim 71, wherein:

the cryptographic information further includes at least one piece of algorithm information for specifying an algorithm used for cryptographic processing.

- 76. The data recording medium of Claim 70, wherein:
- 2 the cryptographic information includes a reference
- 3 instruction indicating to a decryption apparatus decrypting
- 4 the content data that a data section in the content data be
- 5 referred to.
- 1 77. The data recording medium of Claim 76, wherein:
- 2 the cryptographic information further includes a detect

- 3 instruction for detecting, from the content data, bit data;
- 4 that matches the certain bit sequence shown by the bit pattern
- 5 information, and the decryption apparatus determines the order
- 6 in which the reference and detect instructions are performed.
- 1 78. The data recording medium of Claim 70, wherein:
- 2 the cryptographic information further includes at least one
- 3 piece of algorithm information specifying an algorithm to be
- 4 used when decrypting the content data.
 - 79. The data recording medium of Claim 78, wherein:
 - the cryptographic information includes a plurality of
 - pieces of algorithm information and pieces of range
 - information showing the application range of each piece of
 - algorithm information.

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- 1 80. The data recording medium of Claim 79, wherein:
- 2 the cryptographic information includes priority ratings
- 3 used to determine which algorithm information should be
- 4 applied when the application ranges of a plurality of pieces
- 5 of algorithm information overlap.
- 81. A cryptographic processing method, comprising:

- 2 a data reading step for reading content data and
- 3 cryptographic information from a portable storage medium, the
- 4 cryptographic information including information used to
- 5 specify a certain part of the content data on which
- 6 cryptographic processing is to be performed;
- 7 a part specifying step for specifying, based on the read
- 8 cryptographic information, the certain part of the read
- 9 content data; and

- a cryptographic processing step for performing one of encryption and decryption on the certain part of the read content data.
- 82. A cryptographic processing method encrypting content data and recording the encrypted content data onto a storage medium, the cryptographic processing method comprising:
- 4 a cryptographic information reading step for reading, from
- 5 a portable storage medium, cryptographic information including
- 6 information used to specify a certain part of the content data
- 7 on which cryptographic processing is to be performed;
- 8 a part specifying step for specifying the certain part of
- 9 the obtained content data based on the read cryptographic
- 10 information;
- 11 a cryptographic processing step for encrypting the certain

- 12 part; and
- a content data recording step for recording the encrypted 13
- 14 content data onto the storage medium.
- 1 A cryptographic processing method performing
- cryptographic processing on content data, the cryptographic
- 3 method comprising:
- a data obtaining step for obtaining, from received data, 4
- 5 content data, and cryptographic information including

information used to specify a certain part of the content data

on which cryptographic processing is to be performed, the

received data consisting of content data and cryptographic

information that has been multiplexed and transmitted;

a part specifying step for specifying the certain part of the obtained content data based on the obtained cryptographic information; and

13 a cryptographic processing step for performing one of 14 encryption and decryption on the certain part of the content

15 data.

- 1 A cryptographic processing method performing
- cryptographic processing on content data, the cryptographic 2
- 3 processing method comprising:

- 4 a content data obtaining step for obtaining content data;
- 5 a cryptographic information obtaining step for obtaining
- 6 cryptographic information including information specifying a
- 7 part on which cryptographic processing is to be performed in
- 8 the contents data, the information including a reference
- 9 instruction indicating that a data section in the content data
- 10 be referred to;
 - a part specifying step for specifying the certain part of the content data based on the cryptographic information by referring to the data section in the content data as indicated by the reference instruction; and
 - a cryptographic processing step for performing one of encryption and decryption on the certain part.